Egyptian Art and Architecture
The Road to the Afterlife

California Standard 6.2.5: Discuss the main features of Egyptian art and architecture.

Purpose: Students will understand that both art and architecture was related to the Egyptian religion.

Objectives:
- Students will read about Egyptian gods, goddesses, the afterlife and the relationship of religion to the art and architecture of ancient Egypt.
- Students will learn vocabulary relating to Egyptian art, and architecture.
- Students will perform Reader’s Theater plays “Anen the Artist” and “Building the Pyramids”.
- Students will complete a project from a list of choices.

Procedure:
- Day 1: Present vocabulary relating to art and architecture
- Day 2: Read “Exploring the Culture” and “Egyptian Art” (pgs. 204,205 in A Message of Ancient Days).
- Day 3: Read “Art of Ancient Egypt” and “Returning from Market” and discuss two dimensional drawings and proportion. Practice drawing an Egyptian figure using graph paper.
- Day 4: Perform a Reader’s Theater called “Anen the Artist”.
- Day 5: Present vocabulary relating to pyramids. Make flashcards and illustrate them.
- Day 6: Perform a Reader’s Theater called “Building the Pyramids”.
- Day 7: Choose from a list of projects relating to art or architecture and demonstrate a knowledge of techniques used by Egyptian arts or builders. Projects will be accompanied by a 1 page description of the project and its historical context.
- Days 7-10 Students will work on their projects.

Evaluation: Students will choose from a list of art or architectural projects, construct it and describe in a one page paper the techniques that were used by Egyptian arts or builders and the historical context of the art work or building.
Vocabulary for Egyptian Art and Architecture

faience
apprentice
mastaba
pyramid
King Zoser
Imhotep
Step Pyramid
causeway

lapis lazuli
obelisk
King Khufu
Great Pyramid
Giza
Valley of the Kings
burial chamber
granite

gird
reliefs
King Khafre
Great Sphinx
escape shaft
Grand Gallery
tomb
limestone

Other vocabulary

proportion
two dimensional
horizontal
Suggested Egyptian Projects

- Trirama depicting 4 scenes relating to art or architecture
- Diorama of a burial chamber, or embalming room, or a room from an Egyptian museum
- Pyramid including a cross-section of the interior
- Wall mural 12”x18” using hieroglyphics and scenes from the deceased’s life
- Photograph or an Egyptian art work, temple, or structure with a description of the work and its historical significance.
- Design, build, and decorate a sarcophagus, obelisk, or temple
- Other idea of student’s choice (needs teacher approval)
Egyptian Art

EXPLORING THE CULTURE

Ancient Egypt was one of the first and most remarkable civilizations in the world. The early Egyptians lived along the banks of the Nile River. Every year the river overflowed and flooded the land on either side. If this had not happened, there would have been only desert.

The Nile was like a busy highway. Boats, rafts, and ferries traveled up and down the river on business. Farmers planted their crops in the rich soil that formed when the river flooded. Egyptians ate the fish that swam in the Nile and the birds that lived in its marshlands. The marshes also provided the Egyptians with a tall reed called papyrus (pah-PY-ruus). From this plant, they made a strong but lightweight paper on which they could write.

The Nile made Egypt wealthy and successful. The pharaoh, his nobles, and priests and government officials lived in great luxury. They gave fancy parties with lots of food and drink. Groups of singers, acrobats, jugglers, and musicians amused the guests, who ate with their fingers from beautiful pottery dishes. The guests were given small wax cones filled with perfume to wear on top of their heads. As the wax melted, the sweet scent of perfume filled the air.

Most of the Egyptians were not so wealthy. They were hard-working farmers or laborers who lived in houses made of sun-dried mud bricks. There were also craftsmen and artists who were employed by the pharaoh and his nobles to build and decorate the pyramids, palaces, and temples of ancient Egypt.

Just about every part of Egyptian life was concerned with religion. For centuries, the Egyptians worshiped many, many gods. The pharaohs built temples to honor these gods, but ordinary people were not allowed inside them. If a person wanted to ask a question of one of the gods, a scribe would write it down on a scroll of papyrus. Then the question was given to one of the priests who watched over the temple. Egyptian scribes wrote in hieroglyphics (hi-er-oh-GLIF-iks), an early form of picture writing. Since most people in Egypt could not read or write, the role of the scribe was very important.

When important people died, the Egyptians buried them in tombs in the desert or in the cliffs bordering the Nile valley. The first pharaohs of Egypt were buried in tombs with sloping sides and flat roofs made of mud brick. These were called mastabas (MAS-tah-bahs). Other pharaohs wanted grander tombs. They began building great pyramids (PIR-a-mids), with square bases and triangular sides that met at the top. Near the most famous pyramid at Giza (GHEE-za) sat a huge statue of a lion with a human face called the Sphinx (sfinks). The job of the Sphinx was to guard the pyramid.

But even the Sphinx could not keep the grave robbers away. Since the Egyptians knew that the tombs were filled with fabulous treasures, not one pyramid escaped the thieves. Later pharaohs searched for better hiding places. They went to the western part of the desert and built underground tombs deep down under the rocky cliffs. This part of the desert is now known as the Valley of the Kings.
Domestic Life

Take up an Egyptian pose. Which parts of your body are in profile and which parts are face on?

Profile

Face on

Look at the drawing below and, counting the number of squares, complete the list of proportions. The first one is done for you.

head $3 \times 3$

head to toe

shoulder to waist

shoulder to fingertips

width of shoulders

elkow to fingertips

waist to knee

knee to foot

toe to heel

Look carefully at the picture and follow these rules to help you draw a person carrying goods from market. You will need some large grid paper.
Look at Egyptian art in several books. Notice that the pictures are two-dimensional: they lack depth and perspective. To show distance, objects that are meant to be far away are placed at the bottom or top of the painting. The most important person or creature in the painting is usually larger than the others. When two people are shown facing each other, the more important person faces right.

When people are pictured, it appears that you are seeing their heads, eyes, legs, and feet as if looking at them from the side. The bodies of people appear as though you are looking at them from the front. This style of art was unique to ancient Egypt.

Painted scenes on pyramid walls, temples, and rolls of papyrus teach us much about life in ancient Egypt. Many of the paintings tell stories by showing different events in the order they occurred.

1. Imagine being the first Egyptologist to uncover an ancient Egyptian painting like the one shown above. Study this painting, then write a paragraph describing what you think the painting represents.

2. Draw a scene from your life in the Egyptian style on another sheet of paper.
Narrator 1: Painters, metal workers, sculptors, and carpenters were all types of craftsmen in Ancient Egypt. Although each was a highly skilled artist, each was trained as a specialist in his field. Therefore, it took several specialists to create any one piece of art. For example, to build a statue for a temple, a stonemason was needed to cut the right-sized block. Then a trained stone carver would carve the statue, and an inscriber would add hieroglyphics. Perhaps gold or precious gems would be added, requiring the skills of a goldsmith or stone carver. Finally, since all statues were painted, a skilled painter would add the finishing touches. Join us on a journey through the intricate web of the temple workshops where skilled craftsmen labor to create works of art for the temple, tombs, and royal family.

Anen: Greetings, and welcome to the temple workshops! There is much work and commotion among the many artists here, and each craftsman has earned the special privilege of being part of these shops. Only the best artists and craftsmen work on tombs, in the great temple workshops, or on the royal palace.

Harem: We were lucky to be considered two of the painters fit for such labor. Many other artists are very capable and work for wealthy noblemen on their vast estates. Some lesser-trained artists work in small towns and villages, making objects to sell locally in the market. Even the common man needs statues and amulets for daily worship.

Narrator 2: Egyptians were highly religious and superstitious. All of them kept statues of the different gods in their homes and wore amulets around their necks or wrists to protect them from evil spirits. Often the amulet was in the shape of an ankh, or a cross with a loop at the top. This was a symbol of everlasting life.

Anen: Let us take our friends around to see the various crafts we produce. As everyone knows, Egypt is quite famous for its magnificent artwork. Our first stop will be at the stonemason shop where a new shipment of limestone has just been delivered for carving statues. Ah, I see Hapu is seated at his carving bench.

Hapu: Greetings. Today we are carving limestone statues for the royal tomb. Limestone is easier to carve than is the granite from Aswan that was used to build the great obelisks. Some of those granite towers stand almost 100 feet (30 m) tall with their pyramid tops covered in precious metals to reflect the sun’s rays. We also work with sandstone to build temples, but it doesn’t hold up well for smaller statues.
Anen the Artist (cont.)

**Harem:** I am always amazed at the skill of the stone carvers. Some shape enormous blocks of stone standing hundreds of feet high, while others hollow out delicate vases and jars used for cosmetics.

**Hapu:** From the earliest of times, stonemasons have used the simplest of tools to craft fine art pieces from the beautiful minerals found in the Egyptian hills and desert. Saws are used to cut enormous blocks down to the right size, and chisels and drills are used to shape the piece. On this statue, you can see the markings in red ocher that guide my chisel. A stone sculptor must have much patience and a steady hand to keep his carving true and his hands safe from injury. Take a look at Tuyu’s beads before you go. They are truly stunning!

**Anen:** Tuyu, Hapu has been bragging about your fine beadwork. We Egyptians love jewelry and wear as much as we can afford. You must be kept especially busy working for the wife of the pharaoh.

**Tuyu:** How true, Anen. The most popular stones from the desert mines are blue-green turquoise, red and orange carnelian, green feldspar or malachite, mauve amethyst, and the most highly prized deep-blue lapis lazuli, imported from as far east as Afghanistan. A cheap substitute for the lapis lazuli can be made by firing copper ore and silica together to make a rough glass. Then we grind it into a powder, sprinkle it into settings, and melt it to make shiny inlays of blue glass. The queen gets nothing but the real thing, of course.

**Harem:** Of course. I see you are working with some lapis beads now. How do you get them so round and shiny?

**Tuyu:** The stones are broken down and roughly shaped by rolling. Then, they are smoothed by rubbing them together. We make a hole using a bow drill. This is a bow that is pulled back and forth rapidly, spinning a stick with a piece of sharp metal on the end. Once the holes are made, we polish the stones and string them together.

**Anen:** I see. And are these blue amulets, plates, and beads also made of lapis lazuli?

**Tuyu:** No, those all are made from faience, a glazed ceramic material. If we take the glass powder and mix it further with narton, or sodium carbonate, we can paint it on clay items such as beads, drinking vessels, mummy plaques, and plates. Once it is fired, it gives off the rich, shiny blue color you see.
Narrator 3: Today, faience can be found in the form of Egyptian paste, a claylike substance that forms crystals when it dries. Once fired, the crystals create the blue glaze of the faience. Stonemasons also worked on more delicate projects, such as vases, jars, cosmetic holders, and the canopic jars with sculpted animal-face lids that hold the internal organs of the deceased.

Anen: Thank you for the lesson. We must be on our way to the metalwork shops. Come, Harem, let us find our friend Merit. Perhaps he is working on a fine copper or bronze sculpture today.

Merit: Good day, friends. I have saved the unveiling of my latest work for your arrival. Earlier this month I formed a model out of beeswax. Then I carefully covered the model with clay, leaving a small hole in the base. Once the clay was completely dry, it was ready for bronze smelted in a bellow-powered furnace. I poured the molten bronze through a funnel into the clay mold. You can see the wax around the bottom that drained out the hole in the base. Today it is cool enough to break off the mold. Stand back while I carefully crack the clay with my hammer.

Harem: What a stunning likeness of Osiris! You have used such detail and precision that it must be for the pharaoh’s tomb. Is that the way all metal objects are made?

Merit: Some tools, decorative tomb items, and statuettes require molds. For example, an ax is cast in a mold and then sharpened to produce the sharp cutting blade. It is then lashed with leather thongs to a wooden handle. Other metal items, such as farming tools, weapons, cooking utensils, and jars, are made by hammering the metal to the desired thickness and shape.

Harem: I see your supervisor over by the scales. Has there been a shortage of metal?

Merit: No, but weighing the metals is always a serious business and carried out only in the presence of the overseer. In Egypt, all metals are precious because they are rare and difficult to mine. Each morning we are given a precise amount of metal that is carefully weighed and recorded. It is even more strict in the goldsmith shops.

Penthu: Gold is the most precious of all the metals. Gold objects are made in a variety of ways. Over the furnace you can see a worker melting ingots to pour into a cast, or mold. This method is used for smaller objects, such as jewelry, small statues, or amulets. Even the smallest shavings of gold are swept from the ground, cleaned, heated, and repoured to make fresh ingots. Some ingots are made into gold wire. The workers heat the ingot so that it is flexible. Then, using tongs, they pull it through a hole on an annealing board. Each time, they draw it through a smaller and smaller hole, stretching out the gold into a thin, long wire. Different thicknesses of wire are then used to make chains and add decorations to objects.

Harem: How do you make a larger item such as a mummy mask, bowl, or goblet?

Penthu: For larger items the ingots are beaten into thin sheets and then formed to their desired shape. Here, take a look at these goblets for the temple. It takes much skill to form the vessel without marring the surface with the hammer. Ah, here comes the head priest now to check the goblets. I must say farewell.
Anen the Artist

Narrator 4: When you study artwork from famous excavations such as King Tut’s tomb, it may appear that gold was plentiful in Egypt. In reality, all metal was rare and difficult to acquire. Gold was mined in Nubia and the eastern desert. The conditions of the mines were so outrageous that criminals sent there to labor for their crimes rarely returned. All of the gold was sent only to the temple or pharaoh’s workshops, since it belonged to the god-king, and he could choose what and how items would be made.

Anen: We must go on and stop by the carpenters’ benches. I understand they have been building some furniture for the temple, and it is of the latest design.

Harem: One artist cannot help but admire the work of another. I am anxious to see this furniture. I understand it is made completely from imported cedar from Lebanon! Then let’s go visit the craft quarter where everyday objects such as cloth, pots, and leather rope are made. The noise in these workshops is giving me a headache. I can’t wait to get back to the quiet of the temple where we can paint in peace.

Narrator 5: There are many paintings depicting the highly organized workshops of the temple and palace. The pictures show many different craftsmen working under the care of supervisors who inspect the finished art and goods. Although these paintings show the workshops to be clean and orderly, most likely they were hot, noisy, smelly, and crowded with smoldering metals, smoking pots of fatty glue, dust from grinding-stone drills and wooden projects, as well as the bustling of workers passing off pieces to be finished by other specialists.

Narrator 6: High-quality imported wood was very expensive. Therefore, imported wood was usually mixed with locally grown wood to build most items. Then it was painted or inlaid with ebony or ivory to mask the different wood grains. The poor-quality local wood was also carved into statues that had to be covered with gesso, a mixture of chalk and glue, to make the surface smooth for painting.

Smenkh: Be careful as you walk. A carpenter uses many sharp blades in his craft, and the many planks of wood are easy to stumble upon. We produce a wide variety of projects in our shop. The carpenters build boats, furniture, funeral statues, coffins, and even the grand doors for the palace and temples. We rely on many tools for carving, cutting, and splitting. The group of men over there is preparing planks for a boat. One uses an adze and mallet, one uses a bow drill, and another uses a saw. We also use a variety of chisels, axes, and hammers.

Anen: We have come to see the new temple furniture.

Smenkh: Unfortunately, the last piece was finished today and delivered to the temple. The pieces were truly works of art. I was not allowed to work on them myself since I am only an apprentice, but someday I hope to make the coffin for the pharaoh himself.
Narrator 7: Sons of craftsmen always followed their fathers' trades and were trained from a very early age. But one could also pay to become an apprentice or student at a particular workshop. If a boy could not afford the apprentice fee, he might be sponsored by a wealthy landowner or nobleman. Of course, only those showing the most promise were allowed to apprentice at the temple workshops or those for the royal palace.

Anen: Here we are at the tannery. I see Ay is preparing a skin to make rope. Greetings, Ay. How goes the leather work today?

Ay: Fine. Lord Re shines brightly upon our animal skins. I am cutting leather strips, while other workers stretch and weave the strips into a sturdy rope to be used by farmers and builders. People tend to take my work for granted, but leather is used for many tasks and on many tools. Blades are attached to handles with leather, shields and armor are crafted from thick leather hides, and the sandals made for the wealthy are also cut from leather. It seems my work is never done.

Harem: Well, we shall leave you to your work then, friend, and visit the weavers and potters. My wife's friend Maya said we should stop in today on our tour. I hope she is on the loom and can show us how to weave the linen Egypt is so famous for.

Anen: We are in luck, for there is Maya now. Look at the beautiful cloth she is carrying. It must be linen for the royal family; see how it shimmers with gold.

Maya: Hello, Harem. How is your dear wife? I have been expecting you.

Harem: My wife is well and would be most envious of the fine cloth you carry. We assume it is destined for the royal tailors.

Maya: Yes, it was woven just today. Here in the temple workshop we make plain cloth for daily use and also the fine linens used for royal garments and ceremonies. This cloth has fine golden threads woven through it.

Anen: How is such fabric made?

Maya: Weaving is an ancient craft. We Egyptians did not invent the loom, but I believe we make the best use of it and our resources. Most linen cloth is made from flax, and many people are needed to create the cloth. The linen fiber is beaten from the flax plant and then spun on a stick weighted with a flat or domed whorl. Weaving the cloth is more professional work. Looms take up much space, although some wealthier families have looms in their courtyards and employ full-time weavers. As you can see here in my shop, the weavers are generally women, which is unusual for craft shops.

Harem: Obviously, such fine linen as this requires finishing by a special craftsperson. Linen is so valuable it is often used as wages for workers.

Maya: This is true. And we weave not only cloth from flax but also rope, mats, baskets, and sandals. Palm fiber and grasses are also used. Baskets are needed by all for storage in the home. We make baskets of various shapes and sizes, many with lids. We have even made small tables, using woven reeds.
Anen the Artist (cont.)

Anen: You are right, Maya. Egyptians do use their resources well. Now we must move on. We have time only for a quick stop at the potter's stall and perhaps a bite to eat.

Ramos: I heard you were touring about. Let me show you my shop. Here you can see some smaller pots being made with coils of clay. Once the coils are wound about, they are carefully joined and sealed. We create a wide variety of vessels. Some are buff colored with red designs painted in ocher. Others are formed from red clay and then placed upside down over the fire's smoldering ashes to create black insides and rims. Over here is one of our latest inventions. It is a circular platform that can be spun around with your hand or foot. This is very helpful when making the large pots needed for storing water and grains. You can see one of the potters flattening and smoothing the sides, using a large wooden paddle.

Anen: Your pots are some of the finest in Egypt. You have many beautiful funerary vessels fit for a pharaoh's tomb. Thank you for showing us your work.

Narrator 8: The two men went back to the temple where they sat in the shade and ate their meager lunches brought from home. After drinking some water, they went into the temple and gathered their paints and reed brushes.

Narrator 9: Paints were made from egg yolk or gummy glue mixed with color from powdered minerals and water. Artists followed strict rules of color and form. Black, made from soot, represented life in the afterworld. Statues of dead people were often painted black before being placed in a tomb. Green was made from malachite, or copper ore, and represented resurrection. Red, made from iron ore and ocher, meant evil. White represented hope and was made from chalk, gypsum, or limestone. Statues of the gods were painted with yellow ocher to represent their golden skin. Shades of brown were made from various soils, while blue was created using azurite.

Narrator 8: The Egyptians also melted beeswax and spread it over their paintings. They then fused it into a smooth surface by holding it over the embers of a charcoal fire. These ancient artists believed this method allowed their work to last forever. And some paintings have lasted more than 5,000 years.
Anen the Artist (cont.)

Anen: The temple wall has been prepared and marked for our grid painting. First the wall is smoothed and covered with gesso. Then a special grid of lines is drawn horizontally and vertically using twine soaked in paint. The twine is held taut against the wall and plucked, leaving a straight line. The individual squares determine the form of the painting—one square represents the size of a fist of the painted figure.

Harem: Today we will sketch the different figures in the painting. Each part of the body fits a certain number of squares. Each figure, from the hairline to the base of the foot, equals 18 squares. The figures must be painted in profile, with two very important exceptions—the shoulders and eyes always face forward so they are visible. For other items there are other rules. Objects from nature are painted in profile. Garden pools or the Nile are painted from above. Baskets and tables are shown from the side with food and items piled up sideways into the air.

Narrator 10: You may wonder why all figures in Egyptian art were drawn this way. It is not because the artists were unskilled. Art was a means of religious expression rather than a purely artistic one. To the Egyptians, paintings were not symbolic but magical. Tomb paintings were believed to become real in the afterlife, so they had to be depicted as clearly as possible and show all important features at the same time. Therefore, artists were not free to paint what they saw; they had to follow strict rules. It wasn’t until the reign of Akhenaten in the New Kingdom that artists were encouraged to paint and sculpt using perspective.

Anen: We sometimes carve the walls deep in the recesses of a tomb. We use the artificial light of a bronze reflector or oil lamp. These paintings are called reliefs since they are carved as well as painted. Usually reliefs depict scenes of daily life and objects the deceased might need in the afterlife.

Harem: On a relief the grid is also formed to guide the drawing. Then, the background is carved away so that the figure stands out from the wall. Next, the carving is also painted. On outside walls we carve an outline deep into the stone so that the sun can make strong shadows. Sometimes the figure itself is carved away so that the background stands out.

Anen: Harem and I must get back to work. We hope that our brief visit helps you appreciate and want to learn more about our splendid artwork and crafts.
Anen the Artist—Vocabulary and Comprehension

Write the following words on the chalkboard for students to copy on index cards for their picture dictionary. Remind them to research and write a complete definition, explanation, or example and draw a picture.

- amulet
- ankh
- faience
- apprentice
- obelisk
- grid painting and reliefs

Use some or all of the following questions for whole-class discussion, small-group work, or individual written assessment. Allow students to refer to Anen the Artist to answer them.

1. Name five different types of arts or crafts in Ancient Egypt. (any five—items made from carved stone, rocks, or minerals; items crafted from metals, wood, gold, leather, pottery or clay, weaving, and painting)

2. Why do you think the Egyptians carved their statues, buildings, and objects such as bowls and vases out of stone rather than wood? (They did not have a ready wood supply, but they did have an ample supply of different stones from the vast desert.)

3. Describe the steps for making a bronze, copper, or gold object using a mold. (First, a model is carved out of beeswax. Then it is covered with clay, leaving a hole in the bottom for drainage. Once the clay hardens, the melted metal is poured into the clay mold. The wax melts and runs out of the bottom. Once the metal is completely cooled, the clay mold is broken off to reveal the metal object.)

4. Name at least three items built by carpenters. (any three—boats, coffins, statues, doors, furniture, and other decorative items)

5. How could a boy become an artist or craftsman in Ancient Egypt? (He could be trained by his father. A boy could also pay to be an apprentice in a particular craft shop or be sponsored to become a apprentice.)

6. How did a boy get to work in the temple or palace workshops? (He had to develop a high level of skill, as only the most highly skilled artists were chosen to work in the temple or palace workshops.)

7. Describe the steps Ancient Egyptians used to make a gold chain. (A gold ingot is heated and then pulled through a series of holes on an annealing board. This stretches the gold into wire. The wire is pulled through smaller and smaller holes until it is the desired thickness. Then, it is cut and shaped to form a chain.)

8. Which trade was typically run by women? (weaving)

9. Why do you think most Egyptian cloth was woven from flax rather than cotton or wool? (Flax grew in abundance in Egypt and could be used in a wide variety of ways. It was also cooler cloth.)

10. Why did the Egyptians follow a strict mathematical code for pictures? (Art was considered magical and religious rather than a form of artistic expression. It was important to show many features of the person or objects all at once, so all artists were trained in and used the same techniques.)